

AMENDMENTS TO THE SPECIFICATION

Please amend the specification as shown:

Please replace paragraph 5 with the following amended paragraph:

[0005] The early steps of human glycosylation can be divided into at least two different phases: (i) lipid-linked Glc₃Man₉GlcNAc₂ oligosaccharides are assembled by a sequential set of reactions at the membrane of the endoplasmic reticulum (ER) (**Figure 13**) and (ii) the transfer of this oligosaccharide from the lipid anchor dolichyl pyrophosphate onto *de novo* synthesized protein. The site of the specific transfer is defined by an asparagine (Asn) residue in the sequence Asn-Xaa-Ser/Thr (SEQ ID NOs:1 and 2) where Xaa can be any amino acid except proline (Gavel and von Heijne (1990) *Protein Eng.* 3:433-42). Further processing by glucosidases and mannosidases occurs in the ER before the nascent glycoprotein is transferred to the early Golgi apparatus, where additional mannose residues are removed by Golgi specific alpha (α)-1,2-mannosidases. Processing continues as the protein proceeds through the Golgi. In the medial Golgi, a number of modifying enzymes, including *N*-acetylglucosaminyl transferases (GnTI, GnTII, GnTIII, GnTIV and GnTV), mannosidase II and fucosyltransferases, add and remove specific sugar residues. Finally, in the trans-Golgi, galactosyltransferases (GalT) and sialyltransferases (ST) produce a glycoprotein structure that is released from the Golgi. It is this structure, characterized by bi-, tri- and tetra-antennary structures, containing galactose, fucose, *N*-acetylglucosamine and a high degree of terminal sialic acid, that gives glycoproteins their human characteristics. The structure of a typical human *N*-glycan is shown in **Figure 1B**. See also **Figures 14 and 15** for steps involved in mammalian-type *N*-glycan processing.